mixing an analyte, a specific binding partner for the analyte, and the labeled immunoreactant to form a mixture;

irradiating the mixture with light having a wavelength ranging from 400 nm to 1000 nm; and

measuring an emitted luminance from the mixture.

2. (Amended) The method as claimed in claim 1, wherein the lanthanide ion is selected from the group consisting of neodymium (III) ion (Nd^{3+}) and ytterbium (III) ion (Yb^{3+}).

3. (Amended twice) The method as claimed in ~~any one~~ of claims 1, 2, 10 and 11, wherein the sensitizing moiety is selected from the group consisting of fluorescein derivatives; triphenylmethane derivatives; porphyrin derivatives; rhodamine derivatives; phenothiazine derivatives; phenoxazine derivatives; coumarin derivatives; acridin derivatives; thio-indigo derviatives; indigo derivatives; carbocyanine derivatives; squaraine derivatives; and naphthalocyanine derivatives; and phthalocyanine derivatives.

4. (Amended twice) The method as claimed in any one of claims 1 and 10, wherein the ligand is a composition which comprises, as one of its constituents, a compound which comprises an element selected from the group consisting of oxygen, nitrogen, phosphorous, and sulfur moieties which have complexing ability towards Nd (III), Yb (III), or Er (III) ions, and the sensitizing moiety is selected from selected from the group consisting of fluorescein derivatives; triphenylmethane derivatives; porphyrin derivatives; rhodamine derivatives; phenothiazine derivatives; phenoxazine derivatives; coumarin derivatives; acridin derivatives; thio-indigo derivatives; indigo derivatives; carbocyanine derivatives; squaraine derivatives; and naphthalocyanine derivatives; phthalocyanine derivatives.

5. (Amended twice) A kit for detection of an analyte in a test sample comprising

a specific binding partner for the analyte;

an immunoreactant; and

a label wherein the label is a lanthanide ion-ligand complex formed by contacting a lanthanide ion and a ligand, wherein the lanthanide ion is selected from the group consisting of neodymium(III) ion (Nd^{3+}), ytterbium(III) ion (Yb^{3+}), and erbium(III) ion (Er^{3+}), and wherein the ligand comprises a sensitizing moiety which absorbs light in the 400-1000 nm region.

B1 cont'd

6. (Amended twice) An apparatus for detection of an analyte in a test sample comprising:

the kit of any one of claims 5,12, 13 and 14;

a light source in the 400-1000 nm range; and

a detector, which is capable of detecting luminescence in the 800-1600 nm.

B2

8. (Amended) The kit of any one of claims 5, 12, 13 and 14, wherein the sensitizing moiety absorbs in the 400-800*nm* region.

9. (Amended) The apparatus as claimed in claim 6, wherein the detector is capable of detecting luminescence in the 800-1100*nm* range.

B3

10. (New) A method for detection of an analyte in a test sample comprising the steps of:

preparing a lanthanide ion-ligand complex by contacting a lanthanide ion with a ligand, wherein the lanthanide ion is selected from the group consisting of neodymium (III) ion, ytterbium (III) ion (Yb^{3+}) and erbium (III) ion (Er^{3+}), wherein the ligand is in contact with a sensitizing moiety, which absorbs light in the 400 –1000 nm region;

labeling an immunoreactant with the lanthanide ion-ligand complex by contacting the immunoreactant with the lanthanide ion-ligand complex to form a labeled immunoreactant.

mixing the analyte, a specific binding partner for the analyte and the labeled immunoreactant to form a mixture;

irradiating the mixture with light having a wavelength ranging from 400 nm to 1000 nm; and

measuring an emitted luminance from the mixture.

11. (New) The method as claimed in claim 10, wherein the lanthanide ion is selected from the group consisting of neodymium (III) ion (Nd^{3+}) and ytterbium (III) ion (Yb^{3+}).

12. (New) A kit for detection of an analyte in a test sample comprising:

a specific binding partner for the analyte;

an immunoreactant; and

a label wherein the label is a lanthanide ion-ligand complex formed by contacting a lanthanide ion and a ligand, wherein the lanthanide ion is selected from the group consisting of neodymium (III) ion (Nd^{3+}), ytterbium (III) ion (Yb^{3+}), and erbium (III) ion (Er^{3+}), and wherein the ligand is in contact with a sensitizing moiety which absorbs light in the 400-1000 nm region.

13. (New) The kit as claimed in claim 5, wherein the specific binding partner and the immunoreactant are attached to a carrier.

14. (New) The kit as claimed in claim 12, wherein the specific binding partner and the immunoreactant are attached to a carrier.